

the condition of education 2007



INDICATOR 11

Reading Performance of Students in Grades 4, 8, and 12

The indicator and corresponding tables are taken directly from *The Condition of Education 2007*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2007*, visit the NCES website (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007064>) or contact ED PUBs at 1-877-4ED-PUBS.

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Academic Outcomes

Reading Performance of Students in Grades 4, 8, and 12

National average reading scores of 4th- and 8th-graders have varied little over time, though both were 2 points higher in 2005 than in 1992. During this time, however, the reading scores of 12th-graders declined 6 points.

The National Assessment of Educational Progress (NAEP) has assessed the reading abilities of students in grades 4, 8, and 12 in both public and private schools since 1992. Reported on a scale of 0–500, national average reading scores of 4th- and 8th-graders varied little between 1992 and 2005, though both were 2 points higher in 2005 than in 1992 (see supplemental table 11-1). The reading scores of 12th-grade students, however, decreased 6 points during this period.

Achievement levels (*Basic*, *Proficient*, and *Advanced*) identify what students should know and be able to do at each grade. The percentage of 4th-graders performing at or above *Basic* (indicating partial mastery of fundamental skills) in 2005 (64 percent) was not measurably different from the percentage in 1992; however, the percentage performing at or above *Proficient* (indicating solid academic achievement) increased from 29 to 31 percent during this time. Between 1992 and 2005, the percentage of 8th-graders performing at or above *Basic* increased from 69 to 73 percent, while the percentage performing at or above *Proficient* in 2005 (31 percent) was not measurably different from the percentage in 1992. The percentage of 12th-graders performing at or above *Basic* de-

creased from 80 to 73 percent, and the percentage performing at or above *Proficient* decreased from 40 to 35 percent between 1992 and 2005.

Reading results varied by sex and race/ethnicity. For example, females outperformed males in each grade in 2005 (see supplemental table 11-2). White and Asian/Pacific Islander students generally outperformed their peers in all three grades. Between 1992 and 2005, average scores increased for White, Black, Hispanic, and Asian/Pacific Islander 4th-graders (ranging from 5 to 13 points) and for White, Black, and Hispanic 8th-graders (ranging from 4 to 6 points), while scores decreased for White and Black 12th-graders (4 and 6 points, respectively).

NAEP results also permit state-level comparisons of the abilities of 4th- and 8th-graders (but not 12th-graders) in public schools. Of the 42 states that participated at grade 4 in 1992 and 2005, there were increases in average reading scores in 20 states and decreases in 3 states during this period (see supplemental table 11-3). In grade 8, of the 38 states that participated in 1998 and 2005, there were 3 states with higher and 8 states with lower average scores.

¹Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

NOTE: Beginning in 2002, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national samples for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. Differences are based upon unrounded estimates. See *supplemental note 4* for more information on testing accommodations, achievement levels, and NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1998, and 2005 Reading Assessments, NAEP Data Explorer.

FOR MORE INFORMATION:

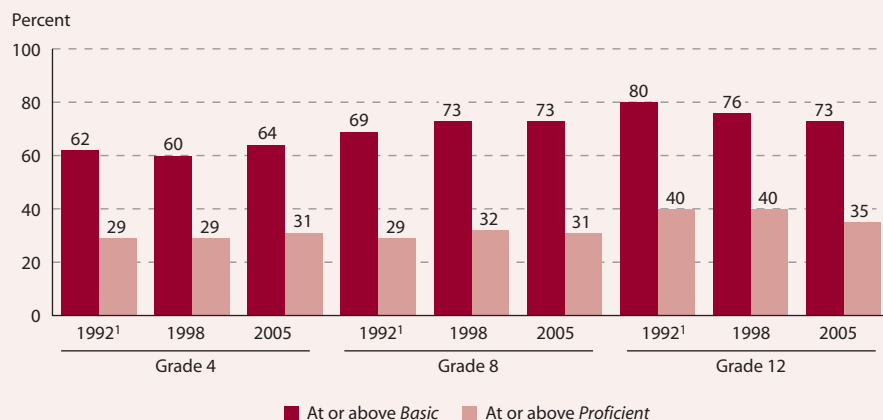
Supplemental Notes 1, 4
Supplemental Tables 11-1,
11-2, 11-3

NCES 2006-451

NCES 2007-468



READING PERFORMANCE: Percentage of students performing at or above *Basic* and at or above *Proficient* in reading, by grade: 1992, 1998, and 2005



Reading Performance of Students in Grades 4, 8, and 12

Table 11-1. Average reading score by percentile and percentage of students at each achievement level, by grade: Selected years, 1992–2005

Percentile and achievement level	Grade 4					Grade 8					Grade 12				
	1992 ¹	1998 ¹	1998	2002	2005	1992 ¹	1998 ¹	1998	2002	2005	1992 ¹	1998 ¹	1998	2002	2005
Average score															
Total	217	217	215	219	219	260	264	263	264	262	292	291	290	287	286
Percentile²															
10th	170	167	163	170	171	213	217	216	220	216	249	242	240	237	235
25th	194	193	191	196	196	237	242	241	244	240	271	268	267	263	262
50th	219	220	217	221	221	262	267	266	267	265	294	293	293	289	288
75th	242	244	242	244	244	285	288	288	288	286	315	317	317	312	313
90th	261	263	262	263	263	305	305	306	305	305	333	337	336	332	333
Percentage at achievement level															
Achievement level															
Below <i>Basic</i>	38	38	40	36	36	31	26	27	25	27	20	23	24	26	27
At or above <i>Basic</i>	62	62	60	64	64	69	74	73	75	73	80	77	76	74	73
At or above <i>Proficient</i>	29	31	29	31	31	29	33	32	33	31	40	40	40	36	35
At <i>Advanced</i>	6	7	7	7	8	3	3	3	3	3	4	6	6	5	5

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

² A score location at or below which a specified percentage of the population falls. In 1992, for example, 10 percent of 4th-graders scored at or below 170, while 90 percent of 4th-graders scored above 170.

NOTE: Beginning in 2002, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national sample for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. See *supplemental note 4* for more information on NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2005 Reading Assessments, NAEP Data Explorer.

Reading Performance of Students in Grades 4, 8, and 12

Table 11-2. Average reading score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 1992 and 2005

Student or school characteristic	Grade 4		Grade 8		Grade 12	
	1992 ¹	2005	1992 ¹	2005	1992 ¹	2005
Total	217	219	260	262	292	286
Sex						
Male	213	216	254	257	287	279
Female	221	222	267	267	297	292
Race/ethnicity ²						
White	224	229	267	271	297	293
Black	192	200	237	243	273	267
Hispanic	197	203	241	246	279	272
Asian/Pacific Islander	216	229	268	271	290	287
American Indian	‡	204	‡	249	‡	279
Parents' education						
Did not finish high school	—	—	243	244	275	268
Graduated from high school	—	—	251	252	283	274
Some education after high school	—	—	265	265	294	287
Graduated from college	—	—	271	272	301	297
Location						
Central large city	—	209	—	254	—	280
Central mid-sized city	—	218	—	259	—	287
Urban fringe/large town	—	223	—	266	—	288
Rural/small town	—	219	—	263	—	285
Students in school eligible for free or reduced-price lunch						
10 percent or less	—	238	—	279	—	297
11–25 percent	—	230	—	270	—	290
26–50 percent	—	221	—	262	—	282
51–75 percent	—	211	—	252	—	273
More than 75 percent	—	197	—	240	—	266

— Not available.

‡ Reporting standards not met (too few cases).

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

² Race categories exclude persons of Hispanic ethnicity.

NOTE: Beginning in 2002, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national sample for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. See *supplemental note 4* for more information on testing accommodations and NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 2005 Reading Assessments, NAEP Data Explorer.

Reading Performance of Students in Grades 4 and 8

Table 11-3. Average reading score for public school 4th- and 8th-graders and change in score since 1992 and 1998, by state: 2005

State	Grade 4		Grade 8	
	Average score in 2005	Change from 1992 ¹ average score	Average score in 2005	Change from 1998 ² average score
United States	217	2*	260	#
Alabama	208	#	252	-3
Alaska	211	—	259	—
Arizona	207	-2	255	-5*
Arkansas	217	6*	258	2
California	207	4*	250	-2
Colorado	224	7*	265	1
Connecticut	226	4*	264	-6*
Delaware	226	13*	266	12*
District of Columbia	191	3*	238	2
Florida	219	11*	256	1
Georgia	214	2	257	#
Hawaii	210	6*	249	#
Idaho	222	3*	264	—
Illinois	216	—	264	—
Indiana	218	-3	261	—
Iowa	221	-5*	267	—
Kansas	220	—	267	-1
Kentucky	220	7*	264	2
Louisiana	209	5*	253	1
Maine	225	-2	270	-1
Maryland	220	9*	261	#
Massachusetts	231	5*	274	5*
Michigan	218	2	261	—
Minnesota	225	4*	268	3
Mississippi	204	5*	251	-1
Missouri	221	1	265	2
Montana	225	—	269	-2
Nebraska	221	#	267	—
Nevada	207	—	253	-5*
New Hampshire	227	#	270	—
New Jersey	223	#	269	—
New Mexico	207	-4*	251	-7*
New York	223	8*	265	#
North Carolina	217	6*	258	-4*
North Dakota	225	-1	270	—
Ohio	223	5*	267	—
Oklahoma	214	-6*	260	-6*
Oregon	217	—	263	-3
Pennsylvania	223	2	267	—
Rhode Island	216	#	261	-3*
South Carolina	213	3	257	2

See notes at end of table.

Reading Performance of Students in Grades 4 and 8

Table 11-3. Average reading score for public school 4th- and 8th-graders and change in score since 1992 and 1998, by state: 2005—Continued

State	Grade 4		Grade 8	
	Average score in 2005	Change from 1992 ¹ average score	Average score in 2005	Change from 1998 ² average score
South Dakota	222	—	269	—
Tennessee	214	2	259	1
Texas	219	6*	258	-3
Utah	221	1	262	-2
Vermont	227	—	269	—
Virginia	226	5*	268	1
Washington	223	—	265	1
West Virginia	215	-1	255	-7*
Wisconsin	221	-2	266	1
Wyoming	223	#	268	5*

—Not available (state did not participate in earlier assessment).

Rounds to zero.

* Change in score is statistically significant ($p < .05$).

¹ 1992 was the first year for state-level data in grade 4. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

² 1998 was the first year for state-level data in grade 8. Data used to calculate differences are for the 1998 assessment where testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were permitted.

NOTE: State samples were not collected for grade 12; therefore, state results for grade 12 are not available. At the state level, the NAEP includes only students in public schools, while other reported national results in this indicator include both public and private school students. Variations or changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples may affect comparative performance results. Beginning in 2002, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national samples for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. Differences are based upon unrounded estimates. See *supplemental note 4* for more information on testing accommodations and on NAEP.

SOURCE: Perie, M., Grigg, W.S., and Donahue, P.L. (2005). *The Nation's Report Card: Reading 2005* (NCES 2006-451), tables 3 and 4, data from U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1998, and 2005 Reading Assessments.

Reading Performance of Students in Grades 4, 8, and 12

Table S11-1. Standard errors for the average reading score by percentile and percentage of students at each achievement level, by grade: Selected years, 1992–2005

Percentile and achievement level	Grade 4					Grade 8					Grade 12				
	1992	1998	1998	2002	2005	1992	1998	1998	2002	2005	1992	1998	1998	2002	2005
Average score															
Total	0.9	0.8	1.1	0.4	0.2	0.9	0.8	0.8	0.4	0.2	0.6	0.7	0.6	0.7	0.6
Percentile															
10th	1.9	1.4	2.1	0.9	0.4	1.2	1.9	1.7	0.5	0.3	0.8	1.3	0.6	1.5	1.1
25th	1.1	0.9	1.7	0.5	0.3	1.1	0.9	0.7	0.5	0.2	0.8	1.2	0.8	1.3	0.8
50th	1.3	1.2	1.3	0.5	0.2	1.1	0.8	0.7	0.5	0.2	0.8	0.9	0.6	0.7	0.8
75th	1.1	0.9	0.9	0.5	0.3	0.8	0.6	1.0	0.4	0.2	0.5	0.9	0.7	0.6	1.1
90th	1.4	0.9	0.9	0.4	0.3	1.3	1.0	0.8	0.5	0.2	0.7	0.8	0.8	0.9	1.1
Percentage at achievement level															
Achievement level															
Below <i>Basic</i>	1.1	0.9	1.2	0.5	0.3	1.0	0.9	0.8	0.5	0.2	0.6	0.9	0.7	0.8	0.8
At or above <i>Basic</i>	1.1	0.9	1.2	0.5	0.3	1.0	0.9	0.8	0.5	0.2	0.6	0.9	0.7	0.8	0.8
At or above <i>Proficient</i>	1.2	0.9	0.9	0.4	0.2	1.1	0.9	1.1	0.5	0.2	0.8	0.9	0.7	0.8	0.7
At <i>Advanced</i>	0.6	0.5	0.5	0.2	0.1	0.3	0.4	0.3	0.2	0.1	0.3	0.4	0.4	0.3	0.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2005 Reading Assessments, NAEP Data Explorer.

Reading Performance of Students in Grades 4, 8, and 12

Table S11-2. Standard errors for the average reading score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 1992 and 2005

Student or school characteristic	Grade 4		Grade 8		Grade 12	
	1992	2005	1992	2005	1992	2005
Total	0.9	0.2	0.9	0.2	0.6	0.6
Sex						
Male	1.2	0.2	1.1	0.2	0.7	0.8
Female	1.0	0.3	1.0	0.2	0.7	0.7
Race/ethnicity						
White	1.2	0.2	1.1	0.2	0.6	0.7
Black	1.7	0.3	1.7	0.4	1.4	1.2
Hispanic	2.6	0.5	1.6	0.4	2.7	1.2
Asian/Pacific Islander	2.9	0.7	3.9	0.8	3.2	1.9
American Indian	†	1.3	†	1.4	†	6.3
Parents' education						
Did not finish high school	†	†	1.4	0.5	1.4	1.7
Graduated from high school	†	†	1.4	0.4	0.8	0.9
Some education after high school	†	†	1.1	0.3	0.8	0.8
Graduated from college	†	†	1.0	0.2	0.8	0.7
Location						
Central large city	†	0.6	†	0.6	†	1.7
Central mid-sized city	†	0.4	†	0.6	†	1.3
Urban fringe/large town	†	0.3	†	0.3	†	1.0
Rural/small town	†	0.3	†	0.4	†	1.1
Students in school eligible for free or reduced-price lunch						
10 percent or less	†	0.5	†	0.4	†	2.0
11–25 percent	†	0.3	†	0.4	†	1.3
26–50 percent	†	0.3	†	0.3	†	1.1
51–75 percent	†	0.4	†	0.4	†	1.8
More than 75 percent	†	0.4	†	0.6	†	2.0

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 2005 Reading Assessments, NAEP Data Explorer.

Reading Performance of Students in Grades 4 and 8

Table S11-3. Standard errors for the average reading score for public school 4th- and 8th-graders and change in score since 1992 and 1998, by state: 2005

State	Grade 4		Grade 8	
	Average score in 2005	Change from 1992 average score	Average score in 2005	Change from 1998 average score
United States	0.2	1.1	0.2	†
Alabama	1.2	†	1.4	2.0
Alaska	1.4	†	0.9	†
Arizona	1.6	2.0	1.0	1.5
Arkansas	1.1	1.6	1.1	1.7
California	0.7	2.1	0.6	1.7
Colorado	1.1	1.6	1.1	1.5
Connecticut	1.0	1.6	1.3	1.7
Delaware	0.8	1.0	0.6	1.5
District of Columbia	1.0	1.2	0.9	2.3
Florida	0.9	1.6	1.2	1.8
Georgia	1.2	1.9	1.3	†
Hawaii	1.0	2.0	0.9	†
Idaho	0.9	1.3	1.1	†
Illinois	1.2	†	1.0	†
Indiana	1.1	1.7	1.1	†
Iowa	0.9	1.4	0.9	†
Kansas	1.3	†	1.0	1.7
Kentucky	1.1	1.7	1.1	1.8
Louisiana	1.3	1.7	1.6	2.1
Maine	0.9	1.4	1.0	1.5
Maryland	1.3	2.0	1.2	†
Massachusetts	0.9	1.3	1.0	1.7
Michigan	1.5	2.1	1.2	†
Minnesota	1.3	1.8	1.2	1.8
Mississippi	1.3	1.9	1.3	1.7
Missouri	0.9	1.5	1.0	1.7
Montana	1.1	†	0.7	1.5
Nebraska	1.2	†	0.9	†
Nevada	1.2	†	0.9	1.4
New Hampshire	0.9	†	1.2	†
New Jersey	1.3	†	1.2	†
New Mexico	1.3	1.9	1.0	1.6
New York	1.0	1.7	1.0	†
North Carolina	1.0	1.5	0.9	1.4
North Dakota	0.7	1.3	0.6	†
Ohio	1.4	1.9	1.3	†
Oklahoma	1.1	1.4	1.1	1.6
Oregon	1.4	†	1.1	1.9
Pennsylvania	1.3	1.8	1.3	†
Rhode Island	1.2	†	0.7	1.2
South Carolina	1.3	1.9	1.1	1.5

See notes at end of table.

Reading Performance of Students in Grades 4 and 8

Table S11-3. Standard errors for the average reading score for public school 4th- and 8th-graders and change in score since 1992 and 1998, by state: 2005
—Continued

State	Grade 4		Grade 8	
	Average score in 2005	Change from 1992 average score	Average score in 2005	Change from 1998 average score
South Dakota	0.5	†	0.6	†
Tennessee	1.4	2.0	0.9	1.5
Texas	0.8	1.7	0.6	1.5
Utah	1.0	1.5	0.8	1.3
Vermont	0.9	†	0.7	†
Virginia	0.8	1.6	1.0	1.5
Washington	1.1	†	1.3	1.7
West Virginia	0.8	1.5	1.2	1.6
Wisconsin	1.0	1.4	1.1	2.2
Wyoming	0.7	†	0.7	1.5

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1998, and 2005 Reading Assessments.